

FIG. 1

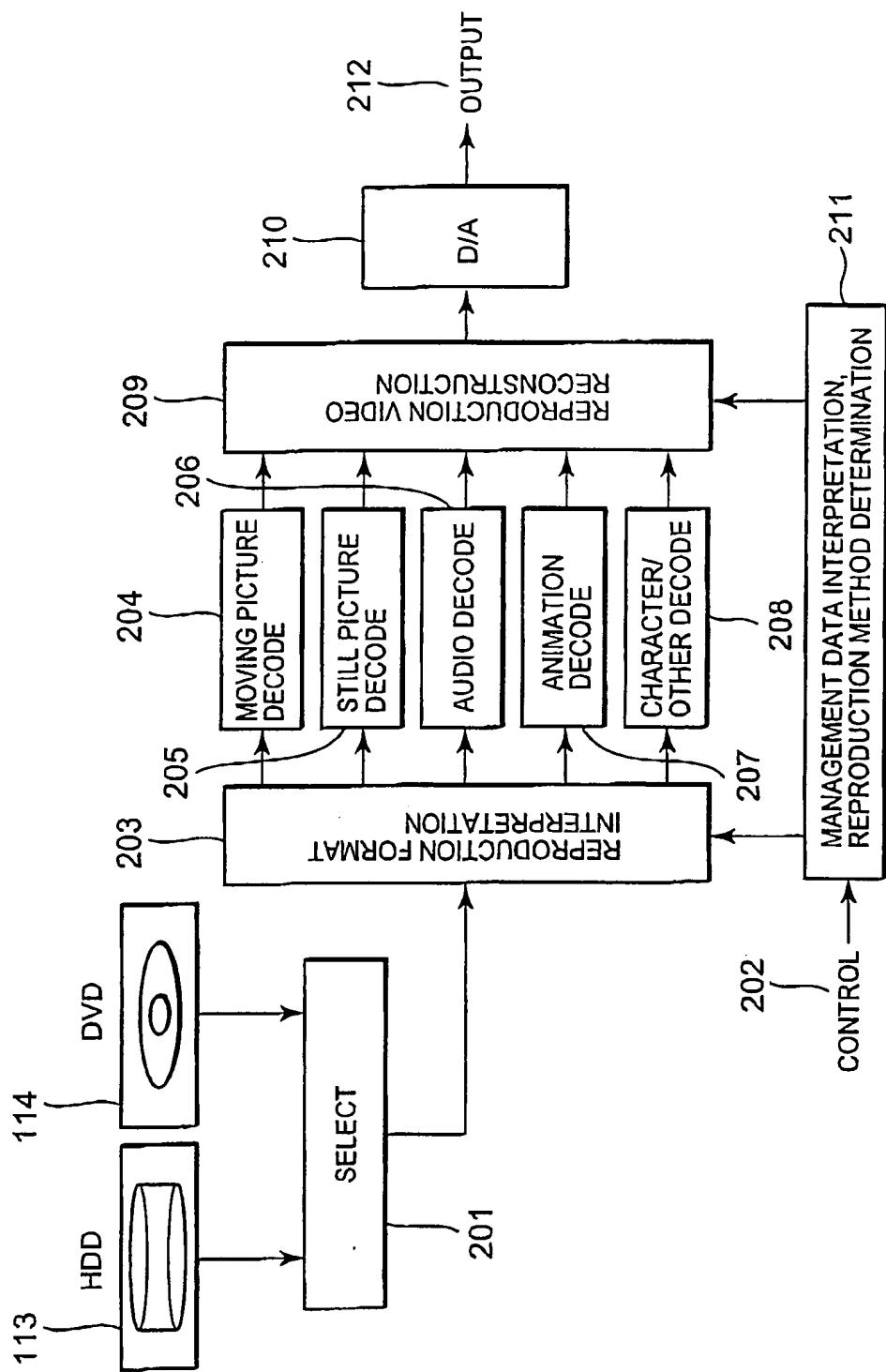


FIG. 2

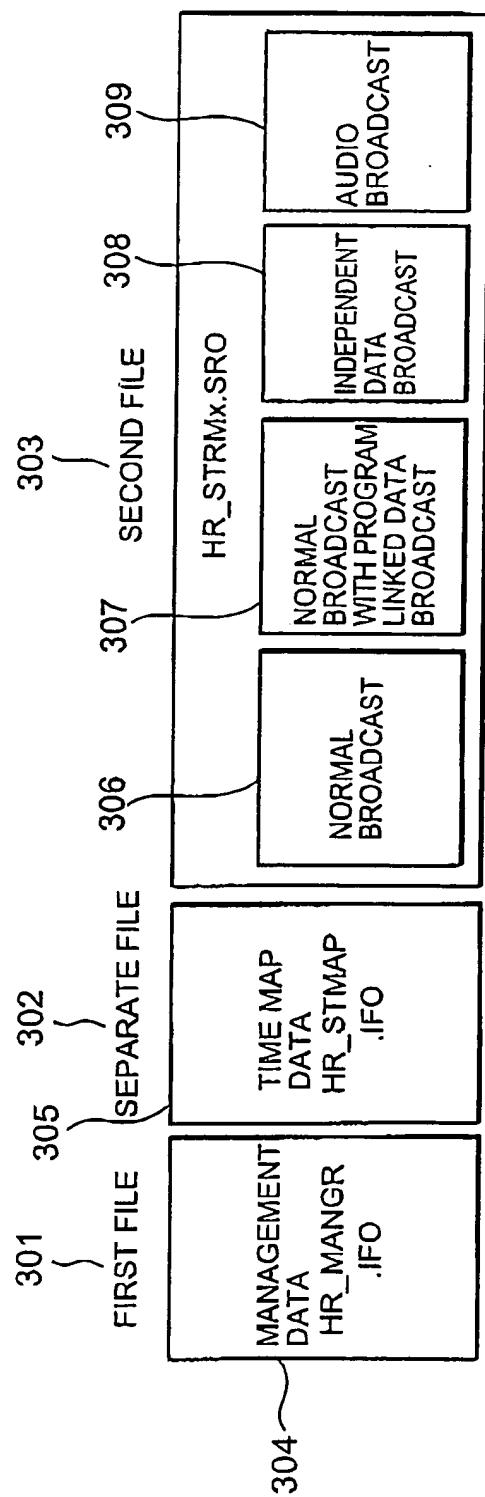


FIG. 3

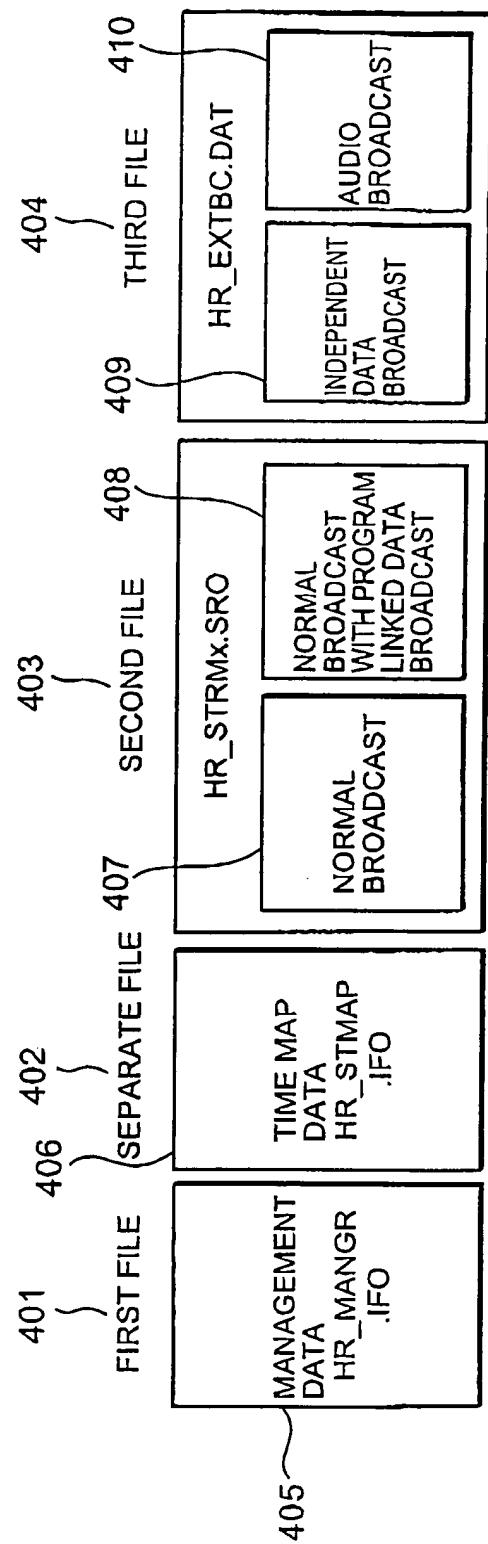


FIG. 4

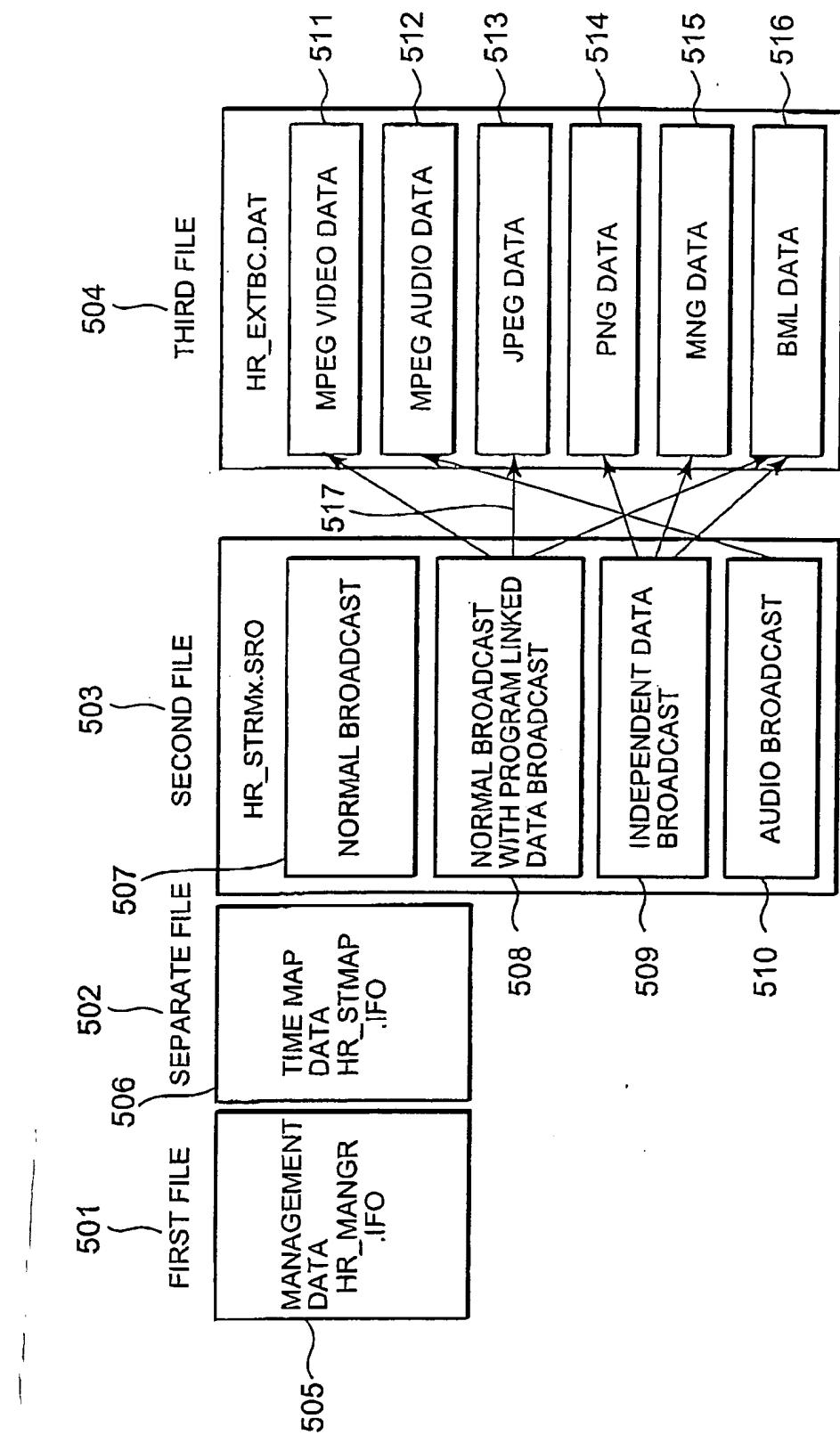


FIG. 5

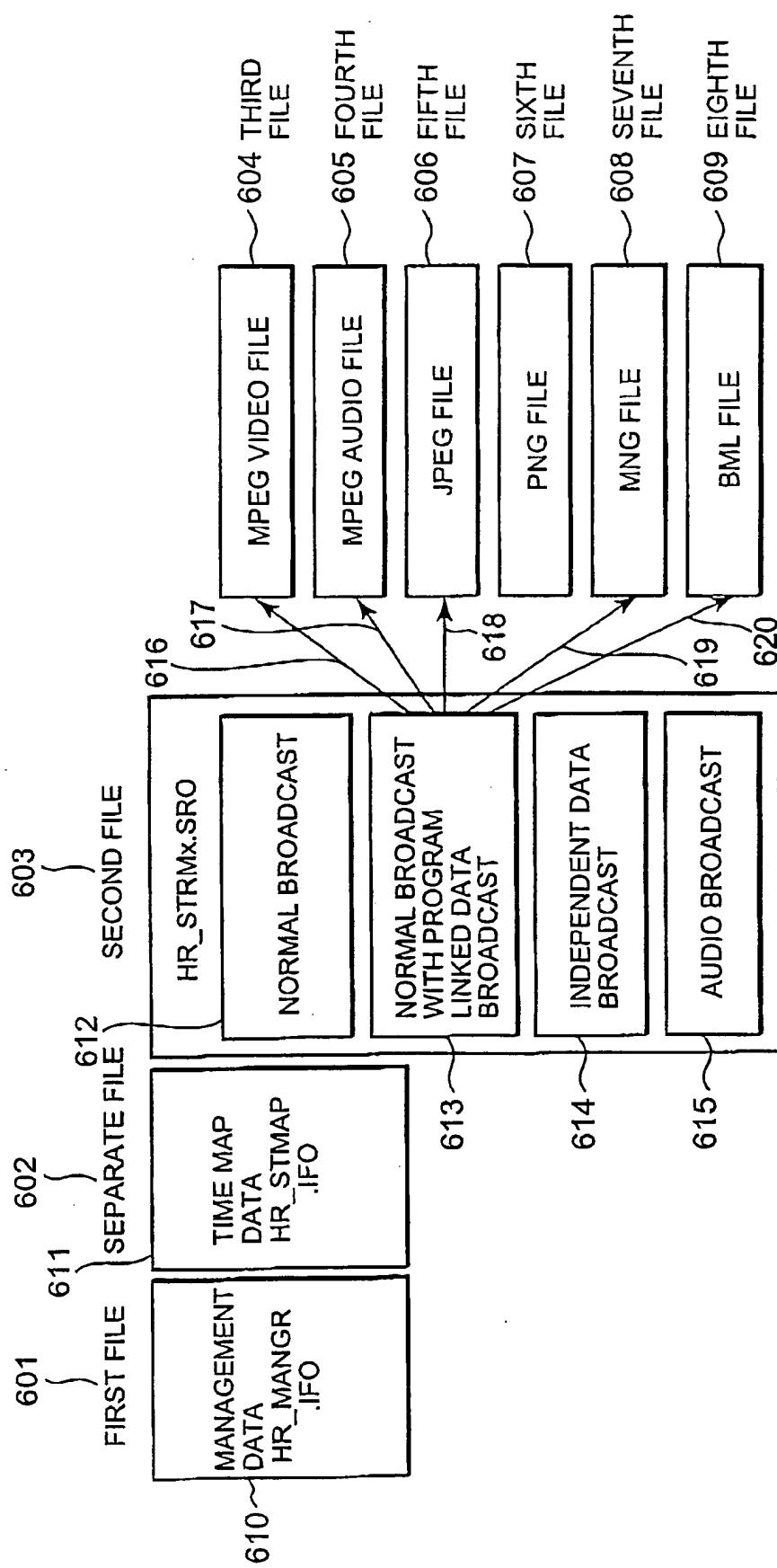


FIG. 6

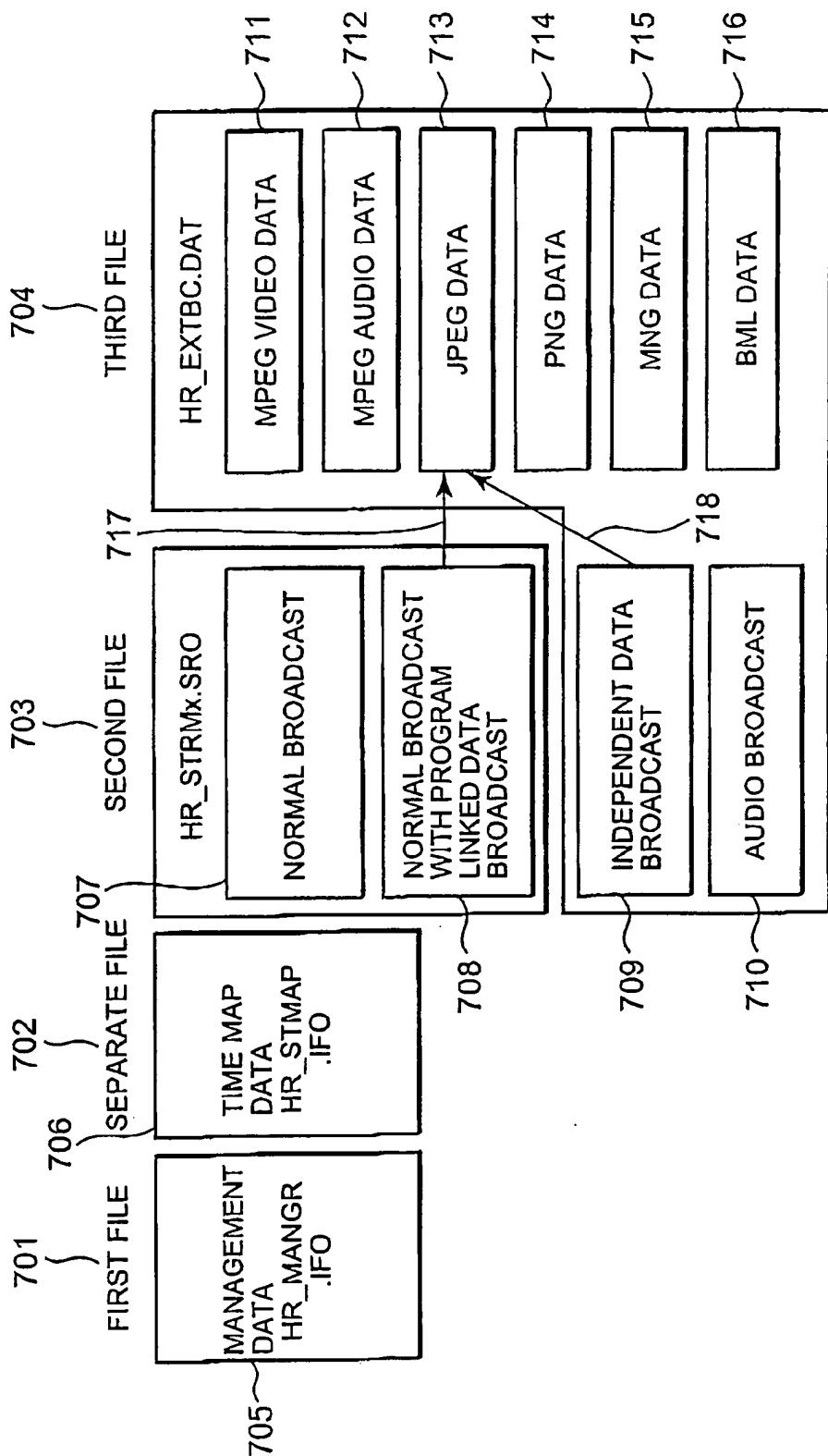


FIG. 7

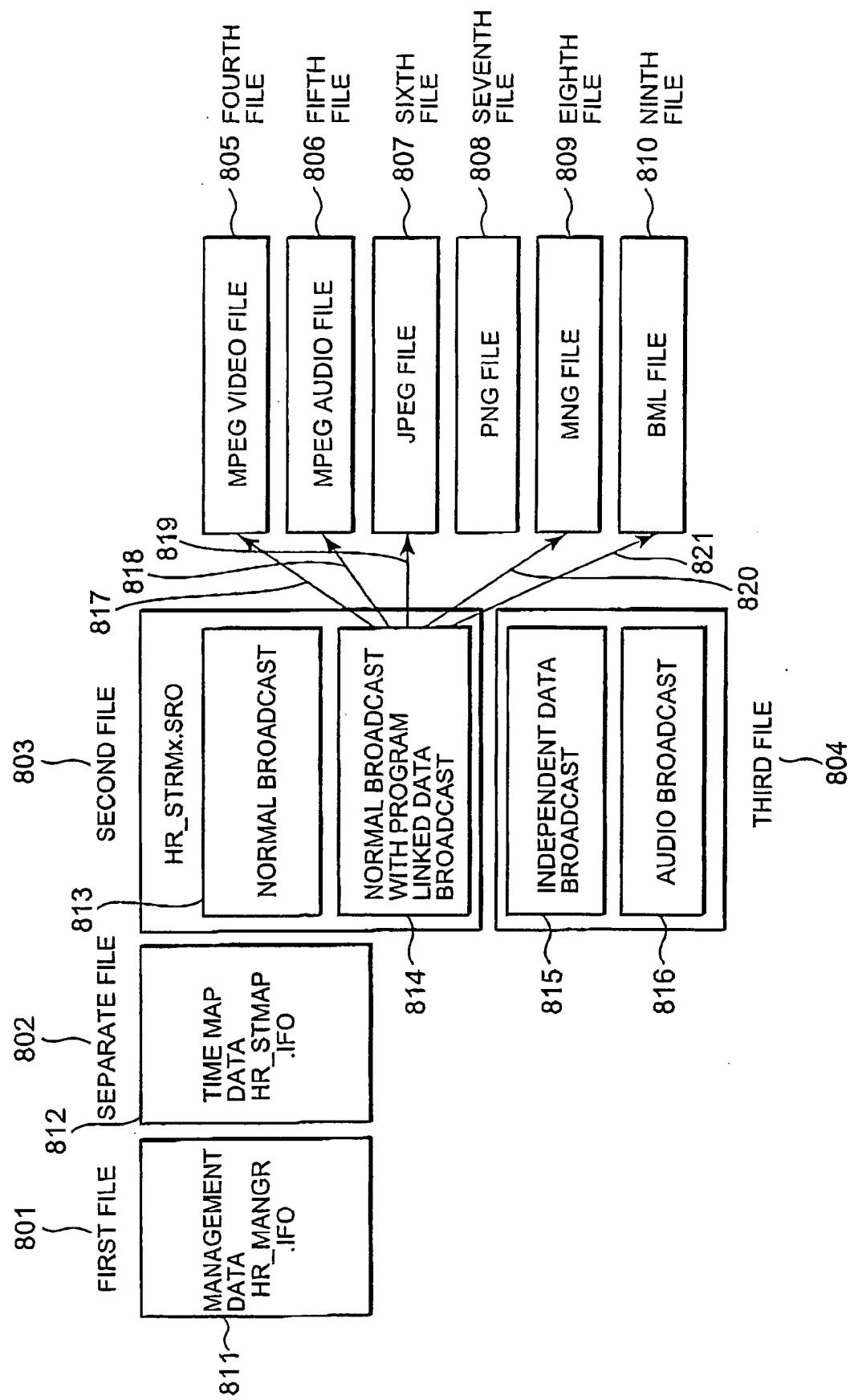


FIG. 8

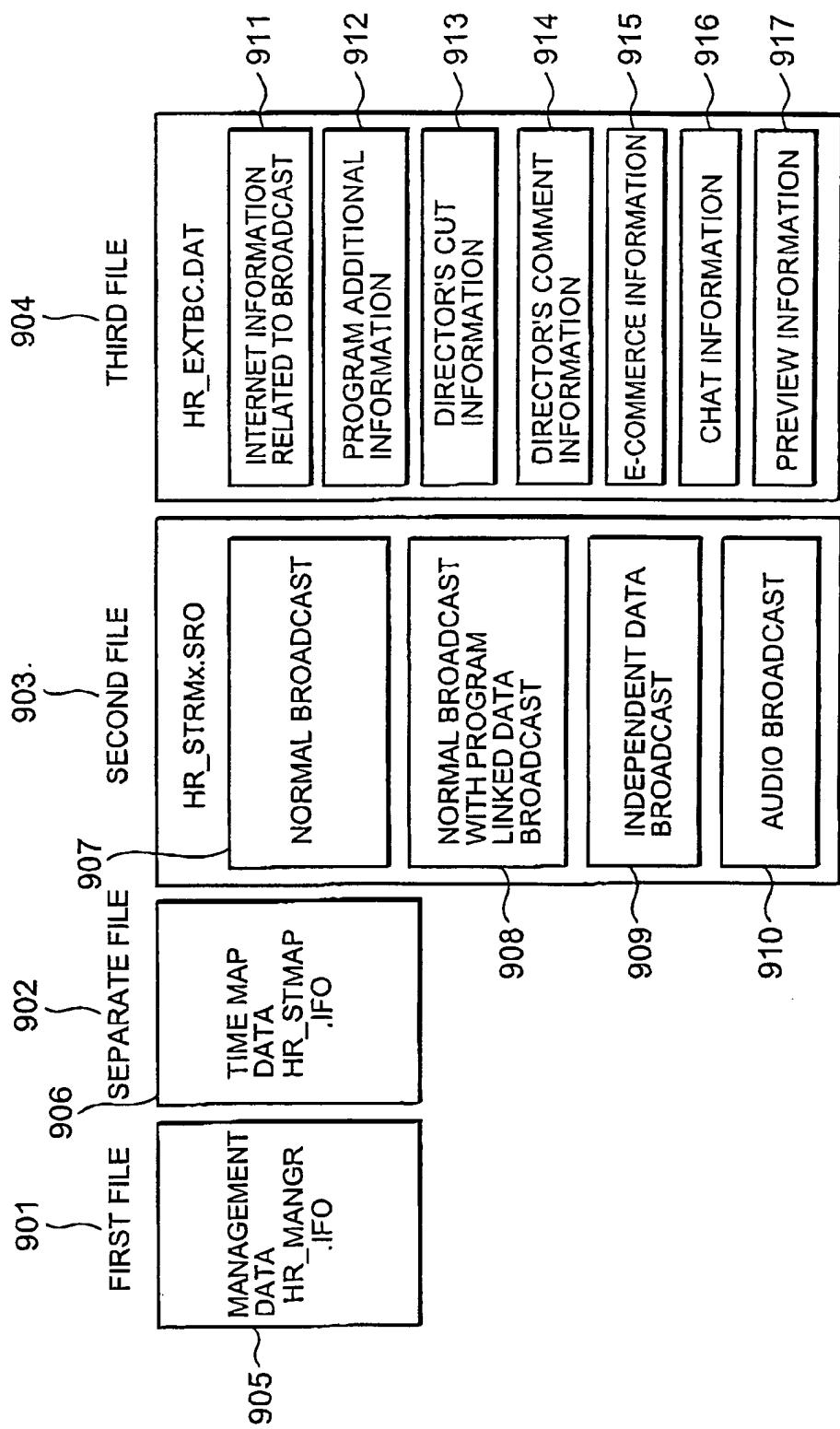


FIG. 9

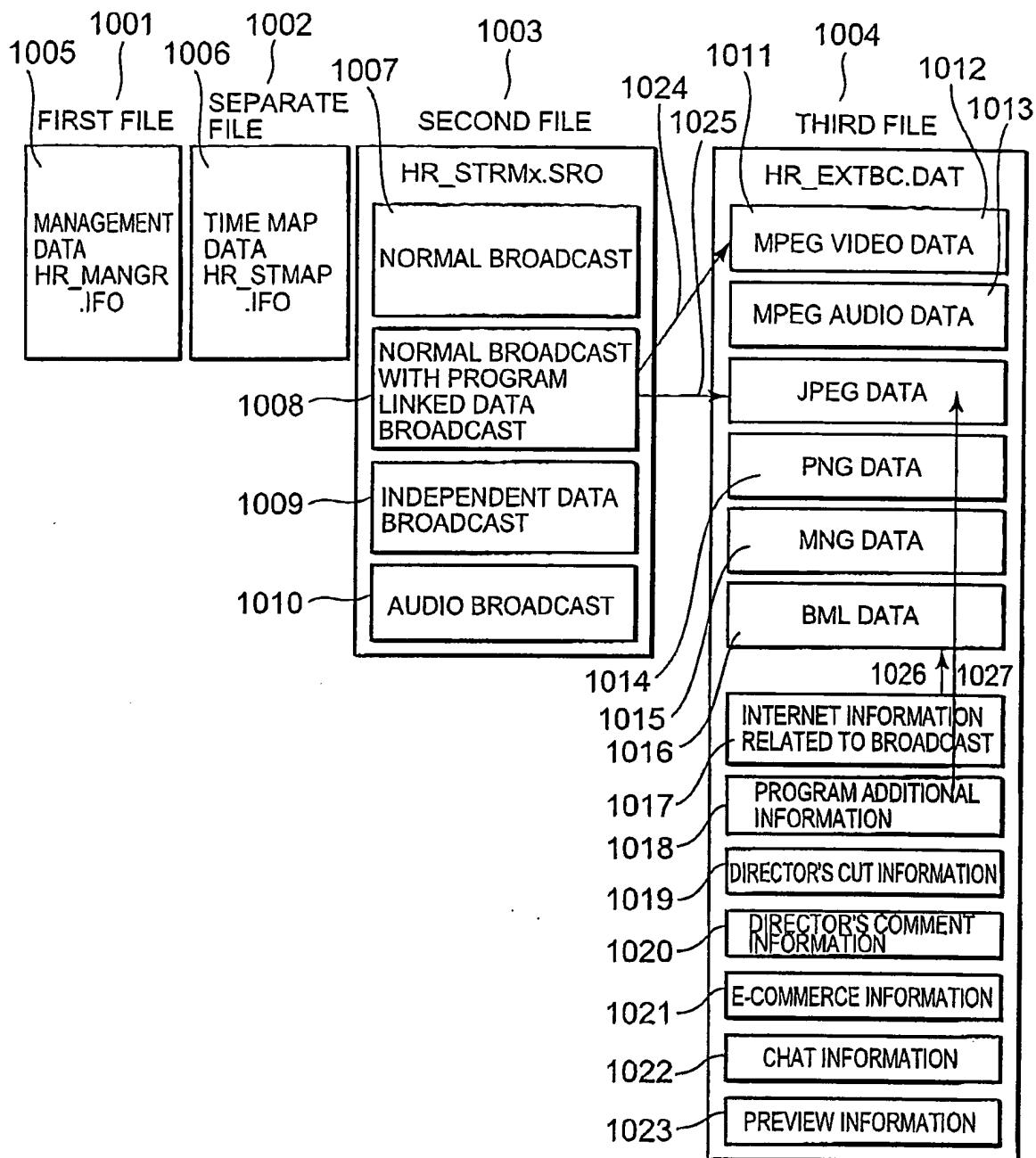


FIG. 10

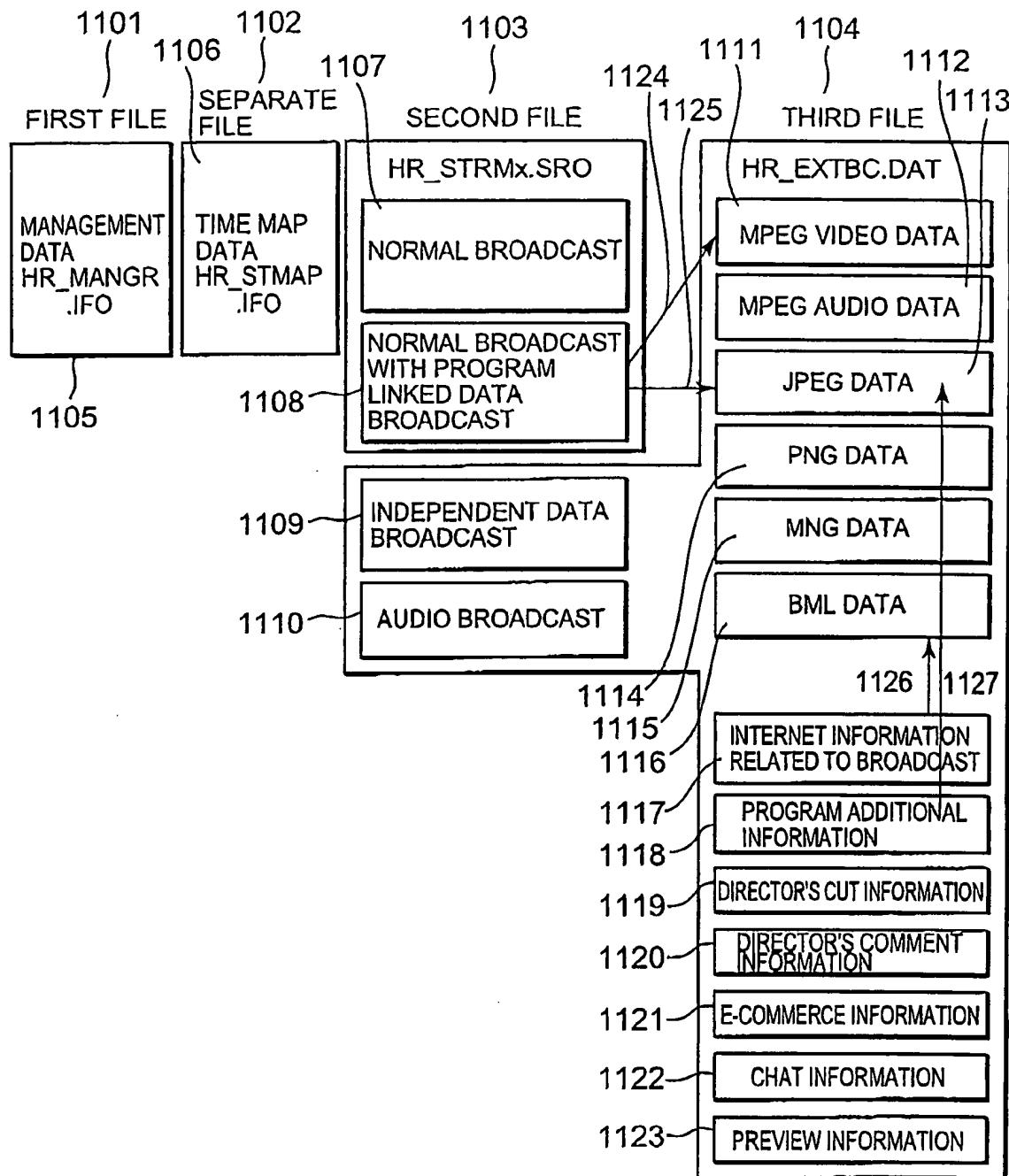


FIG. 11

DVD_HDVR

HR_MANGR.IFO

STREAM FILE INFORMATION TABLE (STM_AVFIT)

STM_AVFIT INFORMATION

DATA BROADCAST RECORDING FILE ID FLAG (DATA BROADCAST RECORDING FILE ID FLAG)

ZERO TH BIT 0: DATA BROADCAST IS NOT INCLUDED IN HR_STRMx.SRO, 1: INCLUDED

FIRST BIT 0: DATA BROADCAST LINKED WITH MAIN BROADCAST IS NOT INCLUDED IN HR_STRMx.SRO, 1: INCLUDED

SECOND BIT 0: INDEPENDENT DATA BROADCAST IS NOT INCLUDED IN HR_STRMx.SRO, 1: INCLUDED

THIRD BIT 0: INDEPENDENT AUDIO (RADIO) BROADCAST IS NOT INCLUDED IN HR_STRMx.SRO, 1: INCLUDED

OTHER BIT: RESERVED

BROADCAST RELATED DATA RECORDING FILE ID FLAG (BROADCAST RELATED INFORMATION RECORDING FILE ID FLAG)

ZERO TH BIT 0: BROADCAST RELATED INFORMATION IS NOT INCLUDED IN HR_STRMx.SRO, 1: INCLUDED

OTHER BIT: RESERVED

SOB STREAM INFORMATION #1 ~ SOB STREAM INFORMATION #n

STM_ATR

DATA BROADCAST ID FLAG (DATA BROADCAST ID FLAG)

ZERO TH BIT 0: DATA BROADCAST IS NOT INCLUDED IN SOB, 1: INCLUDED

FIRST BIT 0: DATA BROADCAST LINKED WITH MAIN BROADCAST IS NOT INCLUDED IN SOB, 1: INCLUDED

SECOND BIT 0: INDEPENDENT DATA BROADCAST IS NOT INCLUDED IN SOB, 1: INCLUDED

THIRD BIT 0: INDEPENDENT AUDIO (RADIO) BROADCAST IS NOT INCLUDED IN SOB, 1: INCLUDED

OTHER BIT: RESERVED

BROADCAST RELATED DATA ID FLAG (BROADCAST RELATED INFORMATION ID FLAG)

ZERO TH BIT 0: BROADCAST RELATED INFORMATION IS NOT INCLUDED IN SOB, 1: INCLUDED

OTHER BIT: RESERVED

BROADCAST RELATED DATA CONTENT (BROADCAST RELATED INFORMATION CONTENT)

00: BROADCAST RELATED INFORMATION IS INTERNET DATA (STREAMING)

01~11: RESERVED

BROADCAST VIDEO MODE

000: MPEG-2, 001: MPEG-1, 010: MPEG-4, 011: H.264, 100: WM9

101~111: RESERVED

BROADCAST AUDIO MODE

000: MPEG-2 AAC, 001: Dolby AC-3, 010: MPEG-1, 011: MPEG-2 BC

100: DTS1, 101: LPCM, 110~111: RESERVED

BROADCAST STILL-PICTURE MODE

000: JPEG, 001: PNG, 010~111: RESERVED

BROADCAST ANIMATION MODE

000: MNG, 001~111: RESERVED

DATA BROADCAST MODE

000: BML, 001~111: RESERVED

DATA TRANSMISSION MODE

FIG. 12A

00: DATA CARROUSEL MODE
 01: EVENT MESSAGE TRANSMISSION MODE
 10: TRANSMISSION MODE INCLUDING BOTH MODES
 11: RESERVED

DATA CARROUSEL AUTO RENEWAL

00: BROADCAST DATA CARROUSEL ALL DATA RECORDING MODE
 01: SELECTED RECORDING MODE FOR RENEWAL DATA IN BROADCAST DATA CARROUSEL
 10~11: RESERVED

REFRESH FLAG

00: OLD DATA AUTO REFRESH OFF WITH NEW DATA IN NEWS, WEATHER FORECAST,
 STOCK INFORMATION, ETC
 01: OLD DATA AUTO REFRESH ON WITH NEW DATA IN NEWS, WEATHER FORECAST,
 STOCK INFORMATION, ETC
 10~11: RESERVED

REFRESH TIME UPDATED DATA REFRESH TIME (5 BYTES)

YEAR (14 BITS), MONTH (4 BITS), DAY (5 BITS)
 HOUR (5 BITS), MINUTE (6 BITS), SECOND (6 BITS)

TIME MAP FLAG

00: WITHOUT TIME MAP
 01: WITH TIME MAP
 10~11: RESERVED

STORAGE BROADCAST FLAG

00: NORMAL BROADCAST STREAM
 01: STORAGE BROADCAST STREAM
 10~11: RESERVED

EXTRA BROADCAST FILE INFORMATION TABLE (EXT_AVFIT)

EXT_AVFIT INFORMATION

DATA BROADCAST RECORDING FILE ID FLAG (DATA BROADCAST RECORDING FILE ID FLAG)

ZEROTH BIT 0: DATA BROADCAST IS NOT INCLUDED IN HR_EXTBC.DAT, 1: INCLUDED

FIRST BIT 0: DATA BROADCAST LINKED WITH MAIN BROADCAST IS NOT INCLUDED
 IN HR_EXTBC.DAT, 1: INCLUDED

SECOND BIT 0: INDEPENDENT DATA BROADCAST IS NOT INCLUDED IN HR_EXTBC.DAT,
 1: INCLUDED

THIRD BIT 0: INDEPENDENT AUDIO (RADIO) BROADCAST IS NOT INCLUDED IN HR_EXTBC.DAT,
 1: INCLUDED

OTHER BIT: RESERVED

BROADCAST RELATED DATA RECORDING FILE ID FLAG (BROADCAST RELATED INFORMATION
 RECORDING FILE ID FLAG)

ZEROTH BIT 0: BROADCAST RELATED INFORMATION IS NOT INCLUDED IN HR_EXTBC.DAT,
 1: INCLUDED

OTHER BIT: RESERVED

EXTRA STREAM INFORMATION #1 ~ EXTRA STREAM INFORMATION #n

EXT_ATR

DATA BROADCAST ID FLAG (DATA BROADCAST ID FLAG)

ZEROTH BIT 0: DATA BROADCAST IS NOT INCLUDED IN EXTRA STREAM, 1: INCLUDED

FIRST BIT 0: DATA BROADCAST LINKED WITH MAIN BROADCAST IS NOT INCLUDED IN EXTRA STREAM,
 1: INCLUDED

SECOND BIT 0: INDEPENDENT DATA BROADCAST IS NOT INCLUDED IN EXTRA STREAM, 1: INCLUDED

THIRD BIT 0: INDEPENDENT AUDIO (RADIO) BROADCAST IS NOT INCLUDED IN EXTRA STREAM,
 1: INCLUDED

OTHER BIT: RESERVED

BROADCAST RELATED DATA ID FLAG (BROADCAST RELATED INFORMATION ID FLAG)

ZERO TH BIT 0: BROADCAST RELATED INFORMATION IS NOT INCLUDED IN EXTRA STREAM,

1: INCLUDE

OTHER BIT: RESERVED

BROADCAST RELATED DATA CONTENT (BROADCAST RELATED INFORMATION CONTENT)

00: BROADCAST RELATED INFORMATION IS INTERNET DATA (STREAMING)

10~11: RESERVED

COPY MOVE INFORMATION (COPY MOVE INFORMATION)

COPY MOVE FLAG (COPY OR MOVE)

000: ORIGINAL, 001: COPY, 010: MOVE, 011~111: OTHERS

SOURCE FILE INFORMATION (SOURCE FILE INFORMATION)

00: NO SOURCE EXISTS, 01: SOURCE EXISTS IN HR_STRMx.SRO,

10: SOURCE EXISTS IN HR_EXTBC.DAT, 10~11: RESERVED

SOURCE STREAM NAME: SOURCE STREAM NAME

SOURCE STREAM NUMBER: SOURCE STREAM NUMBER

BROADCAST VIDEO MODE

000: MPEG-2, 001: MPEG-1, 010: MPEG-4, 011: H.264, 100: WM9

101~111: RESERVED

BROADCAST AUDIO MODE

000: MPEG-2 AAC, 001: Dolby AC-3, 010: MPEG-1, 011: MPEG-2 BC

100: DTS, 101: LPCM, 110~111: RESERVED

BROADCAST STILL-PICTURE MODE

000: JPEG, 001: PNG, 110~111: RESERVED

BROADCAST ANIMATION MODE

000: MNG, 001~111: RESERVED

DATA BROADCAST MODE

000: BML, 001~111: RESERVED

DATA TRANSMISSION MODE

00: DATA CARROUSEL MODE

01: EVENT MESSAGE TRANSMISSION MODE

10: TRANSMISSION MODE INCLUDING BOTH MODES

11: RESERVED

DATA CARROUSEL AUTO RENEWAL

00: BROADCAST DATA CARROUSEL ALL DATA RECORDING MODE

01: SELECTED RECORDING MODE FOR RENEWAL DATA IN BROADCAST DATA CARROUSEL

10~11: RESERVED

REFRESH FLAG

00: OLD DATA AUTO REFRESH OFF WITH NEW DATA IN NEWS, WEATHER FORECAST, STOCK INFORMATION, ETC

01: OLD DATA AUTO REFRESH ON WITH NEW DATA IN NEWS, WEATHER FORECAST, STOCK INFORMATION, ETC

10~11: RESERVED

REFRESH TIME

UPDATED DATA REFRESH TIME (5 BYTES)
YEAR (14 BITS), MONTH (4 BITS), DAY (5 BITS)
HOUR (5 BITS), MINUTE (6 BITS), SECOND (6 BITS)

TIME MAP FLAG

00: WITHOUT TIME MAP
01: WITH TIME MAP
10~11 : RESERVED

STORAGE BROADCAST FLAG

00: NORMAL BROADCAST STREAM
01: STORAGE BROADCAST STREAM
10~11 : RESERVED

HR_STMAP.IFO

TIME MAP TABLE FOR 1PMT PARTIAL TS
1STREF_SZ : SOBU FIRST REFERENCE PICTURE SIZE
DATABC_PB_TM : SOBU REPRODUCTION TIME (THE NUMBER OF VIDEO FIELDS)
DATABC_SZ : SOBU SIZE (THE NUMBER OF SECTORS)

HR_STRMx.SRO

NORMAL BROADCAST, PROGRAM LINKED DATA BROADCAST, INDEPENDENT
DATA BROADCAST, INDEPENDENT AUDIO BROADCAST STREAM

HR_EXTBC.DAT

DATA BROADCAST DIRECT RECORDING, DATA FILE OBTAINED BY COPYING
OR MOVING PART OF DATA, OR OTHER STREAM

FIG. 12D